Amendments t the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-16. (Canceled)

17. (Currently Amended) A process for the manufacture of a membrane, comprising the steps of

(i) forming a porous substrate by a process comprising the steps of

a. dispersing fibres in water to form a slurry;

b. depositing the slurry formed in step (a) onto a mesh bed to form a fibre network;

c. drying and compacting the fibre network formed in step (b); and

d. applying before or after step (c), to the fibre network, ~~before or after step (c)~~, a dispersion of a binder comprising both silica and a fluorinated polymer; and thereafter,

(ii) impregnating the fibre matrix substrate with a polymeric material to produce a membrane.

18. (Previously Presented) A process according to claim 17, wherein step (ii) is carried out by nip roller coating of the substrate to fill it with a solution of ion-conducting polymeric material, and further compaction and drying of the membrane.

19-22. (Canceled)

23. (Previously Presented) A process according to claim 17, wherein the fibres are randomly oriented in said porous substrate.

24. (Currently Amended) A ~~composite membrane according to claim 13,~~ process according to claim 17, wherein the silica comprises a colloidal aqueous solution, or a silica powder dispersed in water.

25. (Currently Amended) A ~~composite membrane according to claim 13,~~ process according to claim 17, wherein the fluorinated hydrocarbon polymer comprises one or more non-ion-conducting polymer(s).

26. (Currently Amended) A ~~composite membrane~~ process according to claim 25, wherein the non-ion-conducting polymer is selected from the group consisting of polytetrafluoroethylene (PTFE), fluorinated ethylene-propylene (FEP), tetrafluorethylene-ethylene (ETFE) copolymers, poly(vinylfluoride) (PVF) and poly(vinylidinefluoride) (PVDF).

27. (Currently Amended) A ~~composite membrane according to claim 13~~ process according to claim 17, wherein the silica comprises a colloidal silica and the polymer comprises PTFE.

28. (Currently Amended) A ~~composite membrane according to claim 13,~~ process according to claim 17, wherein the ratio of silica to polymer is in the range of from 95:5% to 5:95% based on weight/weight solid materials in the binder mixture.

29. (Currently Amended) A process ~~composite membrane~~ according to claim 28, wherein the ratio of silica to polymer is in the range of from 70:30% to 30:70% based on weight/weight solid materials in the binder mixture.

30. (Currently Amended) A ~~composite membrane~~ process according to claim 29, wherein the ratio of silica to polymer is about 50:50% based on weight/weight solid materials in the binder mixture.

31. (Currently Amended) A ~~composite membrane according to claim 13,~~ process according to claim 17, wherein the mixed binder is in the form of a dilute aqueous dispersion.

32. (Currently Amended) A ~~composite membrane~~ process according to claim 31, wherein the dilute aqueous dispersion has about 10% weight solids in the aqueous solution.

33. (Currently Amended) A ~~composite membrane according to claim 13,~~ process according to claim 17, wherein the fibres comprise at least one glass or silica.

34. (Currently Amended) A ~~composite membrane according to claim 13,~~ process according to claim 17, wherein the fibres have a diameter in the range of from 0.1μm to 50μm.